

L 06556-67

ACC NR: AP6015235

is generated by the response of the second channel of the zero-element. Since the two channels are identical, it appears that the summary noise is the sum of these two components. Orig. art. has: 10 formulas, 2 figures.

SUB CODE: 13,14/ SUBM DATE: 22Sep64/ ORIG REF: C04

Card 2/2 MRE

ZEMEL'MAN, V.B.

Control of temperatures in the reaction zone of a rotating  
furnace. Khim.prom. no.7:541-544 J1 '63. (MIRA 16:11)

ZEMEL'MAN, V.B.

Heat content of phosphates along the length of a rotary furnace during  
their defluorination. Zhur.prikl.khim. 37 no.1:41-45 Ja '64.

(MIRA 17:2)

ZEMELYANSKIY, N.I.; MURAV'YEV, I.V.

Synthesis of esters of phosphorodithioic acids with a substituent in  
the  $\beta$ -position in an alcohol radical. Zhur.ob.khim. 34 no.1:98-102  
Ja '64. (MIRA 17:3)

1. L'vovskiy gosudarstvennyy universitet imeni Iv. Franko.

ZEMENKOV, Boris Sergeyevich; KREKSHINA, L., red.; YEGOROVA, I., tekhn.red.

[Memorable places of Moscow; pages from the life of men of science  
and culture] Pamiatnye mesta Moskvy; stranitsy zhizni deiatelei  
nauki i kul'tury. Moskva, Mosk.rebochii, 1959. 509 p.  
(MIRA 12:12)

(Moscow—Guide books)

ZEMENOVA, M.

Peroral nutrition after gynecological operations. Cesk. gynek.  
29 no. 5:390-392 Je'64

1. Gyn.-por. klin. lek. KU [Karlov university] v Plzni; pred-  
nosta: prof. dr. V. Mikolas.

BERG, A., pовар-instruktor; CHIKLASHKOV, A., master-povar (g.Moskva);  
ASEYEV, V., pовар; SHIROKOV, G.; ZELETOV, A., master-povar  
(g.Kemerovo); GRIGOR'YEV, P., inzh.-tekhnolog

Advice to the cook. Obshchestv. pit. no.8:28-30 Ag '61.  
(MIRA 14:10)

1. Kochubeyevskiy raypotrebsoyuz (for Berg). 2. Restoran  
"Kursk", g.Kursk (for Aseyev). 3. Zamestitel' zaveduyushchego  
proizvodstvom stolovoy No.45, g. Saratov (for Shirokov).  
(Cookery)

Zemakov, I.V.

CHERNYAK, N.Kh.; ZEMEROV, I.V.; NAUMOV, I.S.; SHMELEV, I.P.; NESTEROV, L.Ye.  
STEPANOV, P.I.

Improve and develop communication facilities in the economic  
regions. Vest.sviazi 17 no.8:15-18 Ag '57. (MIRA 10:10)

1.Nachal'nik otdela elektrosvyazi Sverdlovskogo oblastnogo  
upravleniya (for Chernyak). 2. Nachal'nik Sverdlovskogo telegrafa  
(for Zemakov) 3.Nachal'nik Sverdlovskoy mezhdugorodnoy telefonnoy  
stantsii (for Klebanov). 4.Zamestitel' nachal'nika Sverdlovskogo  
upravleniya svyazi (for Naumov). 5.Nachal'nik otdela pochtovoy  
svyazi Sverdlovskogo upravleniya svyazi (for Shmelev). 6.Nachal'nik  
Sverdlovskoy direktsii radiotranslyatsionnykh setey (for Nesterov).  
7.Nachal'nik Ordzhonikidzevskoy kontory svyazi g. Sverdlovska (for  
Stepanov).

(Sverdlovsk--Telecommunication--Congresses)

ZEMEROV, Nikolay Iosifovich; ABRAMOVICH, G.O., red.; KOLBICHEV, V.I.,  
tekhn. red.

[Development of telecommunications in Chelyabinsk Province in  
the seven year plan] Razvitiye sviazi Cheliabinskoi oblasti v  
semiletke. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1960. 21 p.  
(MIRA 15:12)

(Chelyabinsk Province—Telecommunication)

ZEMETS, A.A., prof. (Karaganda)

Characteristics of the disorders of blood circulation in  
pneumoconiosis. Klin. med. 41 no.6:114-120 Je '63.  
(MIRA 17:1)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. -  
prof. A.A. Zemets) Karagandinskogo meditsinskogo instituta.

ZEMETS, A.A., prof.

Acute gastroenteritis of toxinfectious origin. Zdrav.Kazakh.  
17 no.8:28-32 '57. (MIRA 12:6)

1. Iz kliniki propedevtiki vnutrennikh bolezney Karagandinskogo gosudarstvennogo meditsinskogo instituta.  
(GASTROENTERITIS)

ZEMETS, A.A., prof. (Karaganda)

Clinical picture of pneumoconiosis in Karaganda miners.  
Klin.med. 36 no.6:108-113 Je '58 (MIRA 11:7)

1. Iz kliniki propedevtiki vnutrennikh bolezney (zav. - prof.  
A.A. Zemets) Karagandinskogo meditsinskogo instituta.  
(PNEUMOCONIOSIS, epidemiol.  
in Russia, in miners (Rus))

L 18780-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD

R/2501/63/008/001/0031/0042

ACCESSION NR: AT3002462

58

AUTHOR: Protopopescu, M.; Zemirche, S.; Petrescu, N.; Trite, V. (Rumanian orth.)

TITLE: Electrical resistivity of indium as a function of the degree of purity  
(Translation from Rumanian into Russian; original published in the journal  
"Studii si cercetari de metalurgie, Acad. R.P.R.", 1962, 7, 3.)SOURCE: Academia Republicii Populare Romine. Revue Roumaine de metallurgie.  
v. 8, no. 1, 1963, 31-42

TOPIC TAGS: Semiconductor material, electrical resistivity, electrical conductivity, indium, cementation, electrolysis, vacuum distillation, transport phenomena, zone refining, impurity.

ABSTRACT: The relationship between the resistivity of indium and the concentration of impurities was investigated in order to establish a quick and easy method of purity assay for samples too pure for chemical or spectral analysis. Indium of extreme purity is needed for the semiconductor industry. Indium of 99.998% purity was obtained by applying the methods of cementation, electrolysis of hydrochloric acid solutions, vacuum distillation and repeated zone refining, with

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ACCESSION NR: A 3002462

forced cooling. A phenomenological relationship was determined for the ratio of the resistivity at room temperature to the resistivity at liquid nitrogen temperature and the concentration of impurities (by weight) C:

$$\rho_{\text{20}^\circ\text{K}} / \rho_{\text{80}^\circ\text{K}} = 1,48 \cdot \log \frac{1}{C} + 2,15.$$

If this equation is presented graphically, then the concentration of impurities is easily determined by making resistance measurements at room and liquid nitrogen temperatures. Orig. art. has 3 graphs, 1 diagram and 5 tables.

ASSOCIATION: none

SUBMITTED: 000

DATE ACQ: 17Jun63

ENCL: 00

SUB CODE: EL, PH

NO REF SOV: 000

OTHER: 000

Card 2/2

ZEMIJK, J.

"Preparatory processes in weaving."

p. 1064 (Tekstil) Vol. 6, no. 12, Dec. 1957  
Zagreb, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

ZEMIKOV, V. N.; USTIMENKO, B. P.

"Hydrodynamics and heat transfer of rotating flow between two coaxial cylinders."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12  
May 64.

Power Inst, AS KAZSSR

ZEMILINSKIY, Ye., vyadovoy

Pulse pair. Voen. vest. 39 no. 7:89 Jl '60. (MIRA 14:2)  
(Shooting, Military) (Synthetic training devices)

ZEMISEK, O.

The WD 250 horizontal drilling machine, p. 529, STROJIRENSTVI  
(Ministerstvo strojirenstvi) Praha, Vol. 5, No. 7, July 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1955

ZEMISEV, V.N., inzh.; TROITSKIY, V.S., inzh.

Rigid plumb bob for detecting the centers of hidden bench marks.  
[Trudy] VNIMI no.45:325-328 '62. (MIRA 16:4)  
(Surveying instruments) (Mine surveying)

ZEMITE, A. P. In Latvian

ZEMITE, A. P. -- "Determination of Requirement for Liming and Lime Doses for Soils Rich in Organic Matter." Latvian Agricultural Academy, 1951. In Latvian (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latvivskoy SSR, No. 9, Sept., 1955

L 7879-66 EWT(m)/EPP(c)/EWP(j)/T RPL RM

ACC NR: AP5025030

SOURCE CODE: UR/0286/65/000/016/0083/0083

AUTHORS: Belyayev, V. A.; Gromova, V. A.; Zemt, S. V.; Kavrayskaya, N. L.;  
Kopylov, Ye. P.; Kosmodem'yaniskiy, L. V.; Kostin, D. L.; Kut'in, A. M.;  
Lazaryants, E. G.; Romanova, R. G.; Tsaylingol'd, V. L.; Shikhalova, K. P.;  
Shushkina, Ye. N.

ORG: none

TITLE: Method for obtaining synthetic "rubber". Class 39, No. 173942

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 83

TOPIC TAGS: rubber, synthetic rubber, butadiene, styrene, polymer, copolymer,  
polymerization

ABSTRACT: This Author Certificate presents a method for obtaining synthetic

SUB CODE: 1107/  
Card 1/1 nw

SUBM DATE: 03Jul63

UDC: 678.762 678.762-134

L 44109-66 EWT(m)/EWP(j)/T TJP(c) WW/RM  
ACC NR: AP6015673 (A) SOURCE CODE: UR/0413/66/000/009/0076/0076INVENTOR: Lazaryants, E. G.; Aleshin, A. M.; Gromova, V. A.;  
Zemit, S. V.; Kopylov, Ye. P.; Kosmodem'yanetskiy, L. V.; Romanova, R. G.; Troitskiy,  
A. P.; Tsaylingol'd, V. L.; Shikhalkova, K.P.; Shushkina, Ye.N.; Kostin, D. L.

ORG: none

TITLE: Preparation of divinyl-alpha-methylstyrene rubber. ✓ Class 39,  
No. 181294 ✓SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9,  
1966, 76

TOPIC TAGS: rubber, methylstyrene rubber, alpha methylstyrene, divinyl

ABSTRACT: This Author Certificate introduces a method of preparing  
divinyl-alpha-methylstyrene rubber by emulsion copolymerization of  
divinyl with alpha-methylstyrene at 200 and above in the presence of  
persulfate initiators and emulsifiers. To increase the polymerization  
rate and improve the conditions for the granular coagulation of latex,  
commercial grades of sodium salts of the synthetic fatty acids C<sub>10</sub>-C<sub>16</sub>

L 44199-66

ACC NR: AP6015673

are suggested as emulsifiers in the following composition (%): C<sub>10</sub>, 5-7; C<sub>11</sub>, 12-14; C<sub>12</sub>, 16-17; C<sub>13</sub>, 15-17; C<sub>14</sub>, 12-13; C<sub>15</sub>, 9-10; C<sub>16</sub>, 7-8; below C<sub>10</sub> and above C<sub>16</sub>, 15-20. [Translation]

[LD]

SUB CODE: 11/ SUBM DATE: 12Mar62/

Card 2/2 JS

BOGACHEV, V.K.; BELOVASHINA, N.M.; ZEMIT, V.E.

Yaroslavl section of the All-Union Botanical Society. Bot. zhur. "5  
43 no.9:1380-1381 S '58. (MIRA 11:10)

1. Yaroslavskiy pedagogicheskiy institut i Yaroslavskiy sel'sko-  
khozyaystvennyy institut.  
(Yaroslavl--Botanical research)

USSR / Cultivated Plants. Plants for Technical Use. M  
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24980

Author : Zemit, V. E.  
Inst : Yaroslavl Agricultural Institute  
Title : On the Problem of Variability of the Characteristic-Overall Height of Long Fiber  
["Dolgunetz"] Flax Stalks

Orig Pub : Tr. Yaroslavsk. s.-kh. in-ta, 1957, 4, 145-159

Abstract : Cultivation of the plants was conducted under conditions of box sowing in a vegetative little house. The changeability of the stalk's overall height was studied in the parental plants as well as in the first and second seed generation. A repetitive

Card 1/3

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USSR / Cultivated Plants. Plants for Technical Use. M  
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24980

cultivation of flax under equal conditions by seeds, taken from the experimental plants, leads to the equalization of the plants' growth along the general height of the stalk. This takes place at the expense of reducing the general height of the stalk in the generation of tall grasses, and of increasing the general height of the stalk in the generation of undersized plants. A prolonged effect of good or bad conditions of the flax cultivation may lead to the appearance of differentiated ecotype forms in the variety and in the subsequent generations. Unevenness of the agricultural engineering background decreases the harvest and impairs its quality,

Card 2/3

USSR / Cultivated Plants. Plants for Technical Use.  
Oil Plants. Sugar Plants.

M

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24980

and also causes a prolonged or permanent change in the flax nature. The growing heterogeneity of the stalk stand in old seed batches of selective varieties, existing for a long time in industrial sowings, permits the production of an effective mass selection with the application of pulling or a two-fold threshing. A massive improving selection amid the sowings of selective flax varieties produced positive results, and it should be used on seed plots of long fiber ["dolgunetz"] flax.

-- P. N. Kizima

Card 3/3

126

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420003-2

ZEMIT, V. E.

The cultivation of long-stem flax. Moskva, Sel'khozgiz, 1943. 75 p. (49-35700)

SB253.24

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420003-2"

ZEMIT, V. E.

27824. Zemit, V. E. Ob imunitete sortov L'na - Dolgunsa k rzhavchine.  
Selektsiya i semenovodstvo, 1949, No. 9, s. 54-59

SO: Letopis' Zhurnal'nykh Stately, Vol. 37, 1949

ZEMITAN, V.I., gvardii mayor meditsinskoy sluzhby

Signs for designating temporary shelters for wounded and disabled.  
Voen.-med. zhur. no.10:76 O '55. (MLRA 9:10)  
(RUSSIA--ARMY--TRANSPORTATION OF SICK AND WOUNDED)

ZEMITAN, V.I.

"A Sign Denoting the Spots of Temporary Shelter For  
Casualties."

pp. 76 Voyenno-Med. zhur. No.10 October, 1955

BARBALIS, P.; ZEMJTE, A.; NEILANDE, A., red.

[Improvement and fertilization of soils] Augsmu iela-  
bosana un meslosana. Riga, Latvijas Valsts izd-ba,  
1964. 237 p. [In Latvian] (MIRA 18:2)

Country : USSR  
Category : Soil Science. Fertilizers. Mineral Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24648

Author : Zemite, A.

Inst : ~~LatvSSR~~  
Title : Soil Requirements of the Livanskiy Rayon  
(LatvSSR) in Calcium Fertilizers.

Orig Pub : Pochva i urozhay. Riga, 1956, 5, 61-66

Abstract : No abstract.

Card : 1/1

50

ZEMKO, A.; [REDACTED].

Our production of sporting goods. p. 192. FAIPAR. (Faipari Tudomanyos Egyesulet) Budapest. Vol. 5, no. 7, July 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress  
Vol. 5, no. 6, June 1956

REHAK, A.; ZEMKOVA, A.

Functional vascular disorders in atopic neurodermatitis. Cesk.  
derm. 37 no.4:251-254 Ag '62.

1. Kozne oddelenie Detskej fakultnej nemocnice v Bratislave, veduci  
doc. dr. A. Rehak.

(ECZEMA in inf & child) (NEURODERMATITIS in inf & child)  
(VASOMOTOR SYSTEM inf & child)

ZENKOVA, R.I.; KAZACHINSKAYA, T.P.

Characteristics of the trunk pests of Siberian fir in the  
Western Sayan Mountains. [Trudy] STI 35:3-13 '63  
(NIRA 18:2)

ZEMKOVA, R.I., nauchnyy sotrudnik

Use of light traps in the mountain areas of the Western Sayan.  
Zashch.rast.ot vred.i bol. 7 no.6:45 Je '62. (MIRA 15:12)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR.  
(Insect traps)  
(Yermakovskoye District—Forest insects—Extermination)

ZEMKOVA, Z.

"Growth and Transformations of Epithelium of a Pregnant Rabbit womb Outside  
the Organism," Dok.AN, 41, No. 3, 1943. Nbr., State Oncological Inst.,  
Leningrad, -1943-.

KRAWET, Antoni, mgr inz.; ZEMLA, Adam, inz.

Increase of the rotational speed and the rate of control efficiency in sudden cases of unloading turbine generator sets and methods of improving the dynamic properties of the control. Pt.1. Energetyka Pol 16 no.9:Suppl. Energoprzeglad 8 no.5:33-36 S '62.

1. Dzial Maszyn Przeplywowych, Zaklad Badan i Pomiarow, Warszawa.

SLUSARCZYK, Stanislaw, inz.; KRAWET, Antoni, inz.; ZEMLA, Adam, inz.; MICHALOWSKI, Teofil, inz.; TOMASZEWSKI, Zbigniew, inz.

Increased disposable power and work economy of LMZ 50 MW power units.  
Gosp paliw 11 Special issue no.(95):57 Ja '63.

SLUSARCYK, Stanislaw, inz.; KRAWET, Antoni, inz.; ZEMLA, Adam, inz.;  
MICHALOWSKI, Teofil, inz.; TOMASZEWSKI, Zbigniew, inz.

Increased disposable power and work economy of IMZ 50 MW  
power units. Gosp paliw 11 Special issue no.(95):57 Ja'63.

1. Elektrownia Jaworzno II.

KRAWET, Antoni, mgr inz.; ZEMLA, Adam, inz.

Increase of the rotational speed and the control operation at a sudden unloading of a turbine-generator set and methods of improving the dynamic properties of the control. Pt. 2. Energetyka Pol 16 no.11: Suppl.: Energopomiar 8 no.6:42-48 N '62.

1. Dział Maszyn Przepływowych, Zakład Badan i Pomiarów, Warszawa.

ZEMLA, F.

"Champions of the smallest ball game."

p. 28 (Ceskoslovensky Vojak) Vol. 7, no. 1, Jan. 1958  
Prague, Czechoslovakia

86: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

ZEMLA, Janina

Osseous homografts in the treatment of ununited traumatic and  
pathologic fractures of the mandible. Chir. narz. ruchu ortop;  
polska 27 no.1:63-68 '62.

1. Z Kliniki Chirurgii Stomatologicznej AM w Warszawie Kierownik:  
prof. dr. M.Gorski.  
(BONE AND BONES transpl) (MANDIBLE fract)  
(FRACTURES UNUNITED surg)

ZEMIA, J; PESEK, J.

Titration of polioviruses in human amnion cells, using the  
colour test on plastic panels. Acta virol. Engl. Ed., 3:253-257  
O '59.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

(POLIOMYELITIS VIRUS)  
(AMNIOTIC)

SOKOL, F.; LIBIKOVA, H.; ZEMIA, J.

Properties of infectious ribonucleic acid derived from brains  
of mice infected with tick-borne encephalitis virus. Acta virol.  
Engl. Ed. Praha 4 no.2:65-74 Mr '60

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

(RIBONUCLEIC ACID chem.)

(BRAIN chem.)

(ENCEPHALITIS EPIDEMIC exper.)

ZEMLA, J.; VILCEK, J.

Concentration and partial purification of an interferon. Acta  
virol. Engl. Ed. Praha 5 no.2:129 Mr '61.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.  
(VIRUSES)

MAYER, V.; ZEMLA, J.; VILCEK, J.

A method for the production of an interferon in chick-embryo  
cells. Acta virol. Engl. Ed. Praha 5 no.2:130 Mr '61.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.  
(VIRUSES culture)

SOKOL, F.; ZEMLA, J.; MAYER, V.; LIBIKOVA, H.

Infectious ribonucleic acid from purified tick-borne encephalitis virus. Acta virol. Engl. Ed. Praha 5 no.2:132 Mr '61.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

(ENCEPHALITIS EPIDEMIC virol)  
(RIBONUCLEIC ACID)

ZEMLA, J.; VILCEK, J.

Studies on an interferon from tick-borne encephalitis virus-infected cells (IF), II. Physical and chemical properties of IF. Acta virol. Engl. Ed. Praha 5 no. 6:367-372. N '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(ENCEPHALITIS EPIDEMIC virol)

MAYER, V.; ZEMLA, J.

The multiplication of tick-borne encephalitis virus in suspended HeLa cell cultures. Acta virol. (Praha) [Eng] 6 no.1:53-57 Ja '62.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(ENCEPHALITIS EPIDEMIC virol)

ZEMIA, J.; SCHRAMEK, S.

Notes on the effect of interferon on metabolism on chick embryo  
cells. Acta virol. 6 no.3:275-277 My. 162.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.  
(VIRUSES) (EMBRYO metab)

SCHRAMEK, S.; MAYER, V.; ZEMLA, J.

Oxygen uptake and aerobic glycolysis of human cells persistently infected with tick-borne encephalitis virus. Acta virol. 6 no.3: 285 My '62.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.  
(ENCEPHALITIS EPIDEMIC virol) (TISSUE CULTURE)

ZEMLA, J.

Oxygen uptake, glucose utilization and glycolysis in normal and poliovirus-infected HeLa cells. Acta virol. Engl. Ed. Praha 6 no.5: 436-446 S '62.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.  
(POLIOMYELITIS VIRUSES culture) (CARBOHYDRATES metab.)  
(TISSUE METABOLISM)

LIBIKOVA, H.; MAYER, V.; REHACEK, J.; KOZUCH, O.; ERNEK, E.;  
ALBRECHT, P.; ZEMLA, J.

Study of cytopathic agents isolated from Ixodes persulcatus  
ticks. Acta virol. (Praha) [Eng] 7 no.5:475 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

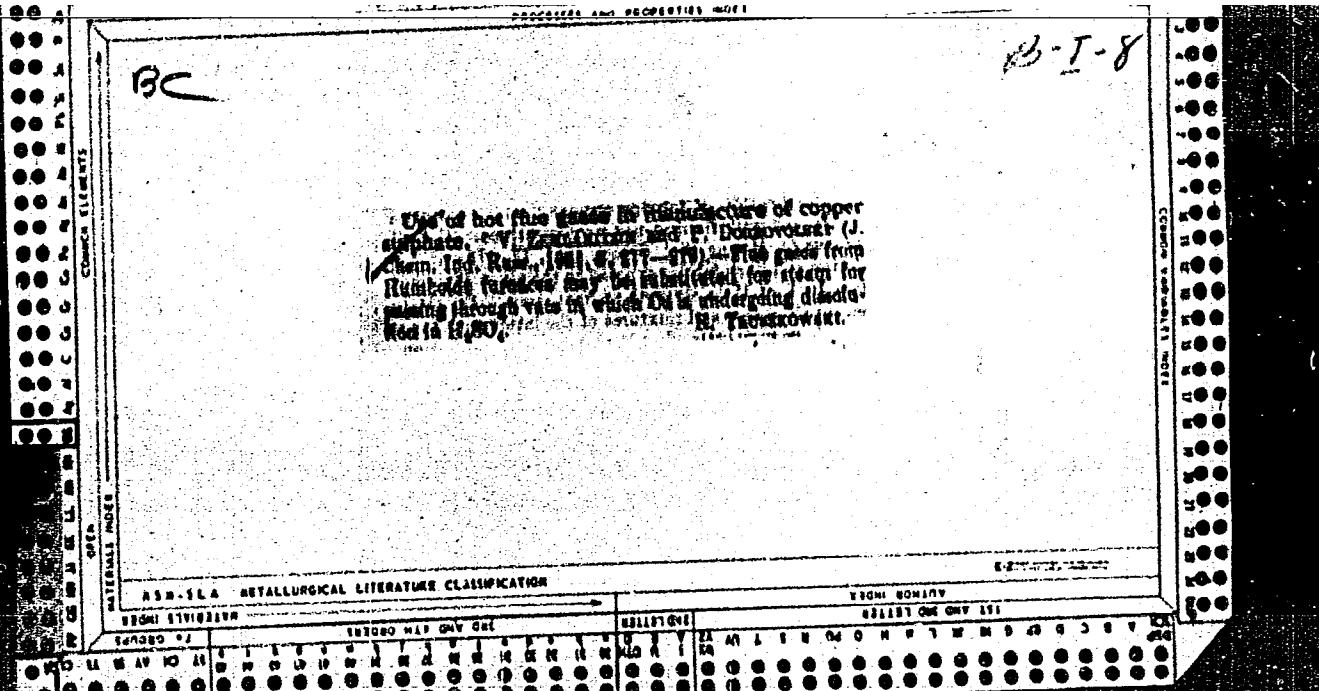
(VIRUSES) (TICKS)

ZEMLA, Stefan

Stocktaking problems of the current state and modernization of  
old-fashioned metallurgy. Problemy proj hut maszyn 12 no.11:  
347-348 N '64.

1. Biprophut, Gliwice.

The composition of plant ashes in relation to the form of phosphorus fertilization. I. Tylikowski and J. Zandl  
*Polish Agr. Forest Ann.* 48, 91-114 (in German, 111-13) (1939).—Vegetative tests were performed with barley and wheat with the purpose of studying the effect of the form of the P fertilizer applied upon the content of ashes of these plants. Both barley and wheat were planted in sand soils, one of which was and the other dry superphosphate. Supertomasine (supertomasine) by the works in Chorzow, ordinary Thomasine and phosphate rock from Rachow were used as fertilizers. The content of  $P_2O_5$ , Ca and Mg was determined in straw and in grain. The results are presented in tabular and graphic form; they can be summarized as follows: As far as the 3 main fertilizers, i. e., superphosphate, Supertomasine and ordinary Thomasine, are concerned, it was found that the productivity of the  $H_2PO_4$  was in accord with the relative values indicated for these fertilizers in literature, namely the effect of Supertomasine was nearly equal to that of superphosphate. No general, regular relations could be established between the percentage content of  $H_2PO_4$ , Ca and Mg in the grain and straw produced by the examined plants.  
Edward A. Ackermann  
10 references.



U-1

Effect of addition of various reagents on the dissolution of copper in sulphuric acid. V. Zemtsov and N. Bodneva (J. Chem. Ind. Russ., 1931, 5, No. 18, 34-36).—The accelerative effect of the addition of various substances on the velocity of dissolution of Cu or Pb in H<sub>2</sub>SO<sub>4</sub> is in the order: HNO<sub>3</sub>>K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>>HCl>MnO<sub>2</sub>>CuSO<sub>4</sub>>PbO<sub>2</sub>. The CuSO<sub>4</sub> crystall. in the presence of K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, is contaminated by Cr alum. R. Truszkowski.

## ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM LIBRARY

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AUGUST 1964

RECEIVED AND FILED

ZEMLEGLYADOV, K.G.

Standardization of molds for investment casting. Standartizatsiya  
28 no.9:53-55 S '64. (MIRA 18:2)

ZEMLEGLYADOV, K.G.; SEMENOVA, T.A.

Standardization in industrial companies. Standartizatsiia 27  
no.12;34-40 D '63. (MIRA 17:4)

ZEMLEGLYADOV, K.G.

Multiple die-casting molds. Biul.tekh.ekon.inform.Gos.nauch.-issl.inst.  
nauch.i tekhn.inform. 17 no 10 1964 (MIRA 18:4)

ZEMLEGLYADOV, Konstantin Grigor'yevich; SEMENOVA, Tamara Akimovna;  
KUZNECHENKOV, K.M., red.

[Efficient ways of introducing the multiple machining method  
based on the standardization of parts and billets] Effektiv-  
nye puti vvedeniia metoda gruppovoi obrabotki na osnove uni-  
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GVIRTS, V.L., tekhn. red.

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ZEMLER, B., arkhitektor

~~Change the method of installing door blocks in partitions. Na  
stroi.Mosk. 2 no.6:31 Je '59.~~ (MIRA 12:8)  
(Doors)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420003-2

ZEMLER, B.,arkitektor

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(Windows)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420003-2"

ZEMLER, Josef

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ZEMLER, Josef

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ZEMLER, Josef

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ZEMLER, Josef

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EXCERPTA MEDICA Sec 9 Vol 13/6 Surgery June 59

3269. THE CLINICAL PICTURE OF THE PRIMARY PHLEGMON OF THE STOMACH (Russian text) - Zemlianoy A. G. - KHIRURGIYA 1958, 5 (70-76) Tables 1 Illus. 1

Five cases are reported and 32 case histories from the literature are analysed. The general toxic symptoms are pronounced and the patients look seriously ill. They moan or cry from pains in the stomach. Respiration is embarrassed. The tongue is dry and the fever rises up to 40° C. Even on insignificant strain of muscles in the epigastric area and seemingly mild changes in the abdominal cavity, the pulse rate is increased. This incoordination of the gravity of the general condition with local manifestations is characteristic of phlegmon of the stomach. Resection of the stomach should be performed as early as possible. If resection is not possible the gastric wall should be injected with antibiotics.

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SSSR i kafedra psikiatrii (zav. - prof. A.V. Snejnevskiy)  
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ZEMLICKA, Frantisek

Experience with the operation of a 4 x 4 m heavy-duty nozzle  
chamber. Slevarenstvi 11 no.8/9:402 Ag '63.

1. Zdarske strojirny a slevary.

ZEMLICKA, J; BERANEK, J.; SMRT, J.

2  
CSSR

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of  
Science, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 12, 1962,  
pp 2784-2795

"Preparation and Methanolysis of Uridine, 6-Azauridine and 6-Azacytidine  
O-Formyl Derivatives"

(3)

ZEMLICKA, J.; BERANEK, J.; SMRT, J.

Preparation and methanolysis of uridine, 6-azauridine and  
6-azacytidine O-formyl derivatives. Coll Cz Chem 27 no.12:  
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1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
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ZEMICKA, J.

3, '5', -dl-O-trityluridine. Coll Sz chem 29 no. 7:1734-1735  
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1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
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ZEMLICKA, J.

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1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

ZEMLICKA, J.; SMRT, J.; SORM, F.

Nucleic acid components and their analogues. Pt. 27. Coll Cz Chem  
28 no.1:241-244 Ja '63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague.

ZEMLICKA, J.

CZECHOSLOVAKIA

no academic degree indicated

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Science,  
Prague.

Prague, Collection of Czechoslovak Chemical Communications, vol 27, No 10,  
Oct 62, pp 2464-2467.

"Self-Condensation of Triformylmethane to 1,3,5-Triformylbenzene"

Co-authors:

KRUPICKA, J. same as above

ARNOLD, Z. same as above

CZECHOSLOVAKIA

ZEMLICKA, J; SORM, F

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications,  
No 2, February 1967, pp 576-590

"Nucleic acid components and their analogues. Part 89:  
Synthesis of 2',3'-o-isopropylidene-o<sup>2</sup>,5'-cyclo-6-aza-  
uridine and 2-(<sup>-D</sup>-ribofuranosyl)-3-amino-4,5-dihydro-  
1,2,4-triazine-3-one (6-azaisocytidine)."

ZEMLICKA, J.

Technology of the processing of fermented dough in stationary mixing machines. p. 132.

TECHNIKA VUYUPU, MLYNARSTVI A PEKARSTVI. (Ministerstvo potravinarskeho prumyslu a vykupu zemedlskych vurobku a Sdruzeni mlynu a pekaren) Praha, Czechoslovakia, Vol. 5, no. 3, Mar. 1959.

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Uncl.

ZEMLICKA, J.; KRUPICKA, J.; ARNOLD, Z.

Self-condensation of triformaldehyde to 1,3,5-triformalylbenzene.  
Coll Cz chem 27 no.10:2464-2467 O '62.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague.

ZEMLICKA, J.

CZECHOSLOVAKIA

no academic degree indicated

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of  
Science, Prague

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Oct 62, pp 2404-2407.

"Phosphates Derived from 3-Hydroxysulpholane and 3-Hydroxysulphol-2-ENE  
as Phosphorylating Agents"

Co-author:

SMRT, J. same as above

ZEMLICKA, J.

SURNAME, Given Names

Country: Czechoslovakia

(1)

Academic Degrees: [not given]

Affiliation: Institute of Organic Chemistry and Biochemistry,  
Czechoslovak Academy of Sciences, Prague

Source: Prague, Collection of Czechoslovak Chemical Communications,  
Vol 26, No 11, November 1961, pp 2850-2851

Data: "Synthetic Reactions of Dimethylformamide. X. Synthesis  
and Reactions of Some Triformyl Derivatives of Acetone  
and Methyl Ethyl Ketone."

Authors:

ZEMLICKA, J.

ARNOLD, Z.

Also: Vol 26, No 11, pp 2852-2864

"XI. Polyformylation of Ketones of Other Types  
and the Problem of the Reaction Course."

ZEMLICKA, J.; SMRT, J.; SORM, F.

Nucleic acid components and their analogs. Pt. 48. Coll  
Cz Chem 29 no. 3:635-644 Mr '64.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague.

ZEMLICKA, J.; SORM, F.

Preparation of 2-chloroethene-1-sulfonyl ureide. Coll Cz Chem  
29 no. 3:837-839 Mr '64.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague.

Country	: Czechoslovakia	G-2
Category	Organic Chemistry. Synthetic Organic Chemistry	
Abs. Jour.	Ref. Zhur.-Khimiya N <sub>o</sub> . 6, 1958	19357
Author	Arnold, Z.; Zemlicka, J.	
Institut.		
Title	Synthetic Reactions of Dimethylformamide. II. Interaction of Ketals with Dimethylformamide and Phosgene.	
Orig. Pub.	Chem. listy, 1958, 52, No 3, 458-467	
<p>Abstract : Study of formylation of diethyl-ketals <math>\text{RC}(\text{OC}_2\text{H}_5)_2\text{CH}_2\text{R}'</math> [acetophenone (I), propiophenone (II), acetone (III), pinacoline (IV), cyclopentanone (V), cyclohexanone (VI)] with dimethylformamide (VII) and <math>\text{COCl}_2</math> (VIII). On the basis of investigations of the products of formylation of ketals the assumption is made that the reaction takes place over the stage of an intermediate quaternary salt <math>[\text{C}_2\text{H}_5\text{OCR}=\text{CR}'\text{CH}=\text{N}(\text{CH}_3)_2]^+\text{X}^-</math> (IX), the decomposition of which occurs, depending upon the nature of R and R' and of the reactants used, according to different schemes: IX <math>\xrightarrow{\text{OH}} \text{RC}(\text{OC}_2\text{H}_5)=\text{CR}'\text{CHO}</math> (X); I <math>\xrightarrow{(\text{CH}_3)_2\text{NH}} [(\text{CH}_3)_2\text{NCR}=\text{CR}'\text{CH}=\text{N}(\text{CH}_3)_2]^+\text{Cl}^-</math> (XI)</p>		

Card: 1/7

f-6

Country :	Czechoslovakia	G-2
Category :		
Abs. Jour. :		19357
Author :		
Institut. :		
Title :		
Orig Pub. :		
<p>Abstract : (XI) <math>\xrightarrow{\text{OH}^-}</math> <math>(\text{CH}_3)_2\text{NCR=CR'CHO}</math> (XII) <math>\xrightarrow{(\text{CH}_3)_2\text{NH}}</math> <math>\text{RCO}-\text{CR'}=\text{CHN}(\text{CH}_3)_2</math> (XIII) <math>\xrightarrow{\text{OH}^-}</math> XI. By the action of <math>(\text{CH}_3)_2\text{NH}</math> the X is converted to XII. Attempts to formylate diethyl ketal of isobutyrophenone (BP 115°/10 mm, n<sub>20</sub>D 1.4823) and diethyl ether of pinacone (XIV) were unsuccessful. All ketals were synthesized from ketones and <math>\text{HC}(\text{OC}_2\text{H}_5)_3</math>. Diethyl ketal of IV, BP 66-67°/23 mm, n<sub>20</sub>D 1.4123. To 0.25 mole VII and 0.125 mole VIII in 160 ml dichlorethane added at 0° 0.05 mole ketal of I, heated 3 hours at 40°, decomposed with 0.2 mole <math>\text{CH}_3\text{COONa}</math> and ice; distillation of <math>\text{CH}_2\text{ClCH}_2\text{Cl}</math>-layer yielded <math>\beta</math>-chlorocinnamic aldehyde, yield 5.8%, BP 55-70° (bath temperature)/0.2 mm; aqueous layer saturated with <math>\text{K}_2\text{CO}_3</math> and extracted</p>		
Card:	2/7	

Country :	Czechoslovakia	G-2
Category:		
Abs. Jour.:		19357
Author:		
Institut.:		
Title:		
Orig. Pub.:		
Abstract:	with $C_6H_6$ - alcohol, 1:1. Extract evaporated in vacuum, from aqueous solution of residue extraction with $C_6H_6$ gave XII, $R = C_6H_5$ , $R' = H$ , yield 25.7%, BP 130°/0.2 mm, MP 61° (from ether) (submits at 60°/0.12 mm); aqueous layer evaporated in vacuum, residue dissolved in dichlorethane and used ether to precipitate XI, $R = C_6H_5$ , $R' = H$ , yield 44.6%, MP 205-207° (decomposes); picrate (PC) $C_{19}H_{21}O_7N_5$ MP 89-90° (from 50% alcohol). After formylation of ketal of II at 50° from $CH_2ClCH_2Cl$ -layer was separated X, $R = C_6H_5$ , $R' = CH_3$ , yield 92.1%, BP 86-94°/0.15 mm. By heating of X, $R = C_6H_5$ , $R' = CH_3$ , with 4 N solution of $(CH_3)_2NH$ in $C_6H_6$ for	
Card:	3/7	

A-7

Country : Czechoslovakia  
Category :

G-2

Abs. Jour. :

19357

Author :  
Institut. :  
Title :

Orig Pub. :

Abstract : 1.5 hours was synthesized XII, R = C<sub>6</sub>H<sub>5</sub>, R' = = CH<sub>3</sub>, yield 53.4%, BP 50°/0.08 mm, MP 80-81° (from ether). Formylation of ketal of III gave mixture (yield 4.6%, BP 120-140°/10 mm) of XII, R = CH<sub>3</sub>, R' = H (XIIa) and XIII, R = = CH<sub>3</sub>, R' = H (XIIIa) (identified by paper chromatography) and 56% XI, R = CH<sub>3</sub>, R' = H, MP 193-197° (decomposes; from pyridine) PC C<sub>14</sub>H<sub>19</sub>N<sub>5</sub>O<sub>7</sub>, MP 100-101°; perchlorate C<sub>8</sub>H<sub>17</sub>N<sub>2</sub>C1O<sub>4</sub> (XV), MP 156°. Hydrolysis of XV with aqueous KOH at 25° yielded (72.8%) mixture of XIIa and XIIIa, while treatment of XV with aqueous KCl and hydrolysis of resulting chloride in moderate vacuum gave XIIIa, yield 55.4%, MP 64° (from ether); PC, MP 140°. XIIa was synthesized from CH<sub>3</sub>CCCH=CHCl (0.3 mole)

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Country :	Czechoslovakia	G-2
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Abs. Jour. :	19357
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Author :	
Institut. :	
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Abstract : and 300 ml 2.3 N solution of  $(CH_3)_2NH$  in toluene (at 0°), yield 77.5%, BP 111-112°/7 mm. Formylation of ketal of IV at 50° gave X, R = tert-C<sub>4</sub>H<sub>9</sub>, R' = H, yield 82%, BP 105-110°/9 mm, n<sub>20D</sub> 1.4705; semicarbazone (SC), MP 163-165° (from 50% alcohol), and small amount of XIII, R = = tert-C<sub>4</sub>H<sub>9</sub>, R' = H, MP 38.5° (from ether at - 75°), sublimates at 35-40°/0.1 mm. Formylation of ketal of V gave 2-dimethylamino-cyclopenten-1-al, yield 47.6%, BP 117-121°/1 mm, MP 87-87.5° (from ether) (sublimates at 75-80°/0.1 mm). From ketal of VI was obtained 2-ethoxy-cyclohexene-1-al, yield 59%, BP 140-160°/11 mm, MP 36° (from ether at - 75°)

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6-8

Country : Czechoslovakia  
Category :

G-2

Abs. Jour. :

19357

Author :  
Institut. :  
Title :

Orig Pub. :

Abstract : (sublimates at 30-35°/0.1 mm),  $n^{20}_D$  1.5100; SC, MP 207-207.5° (from 50% alcohol). To 0.2 mole K in 100 ml liquid NH<sub>3</sub> added 0.05 mole pinacone, replaced NH<sub>3</sub> by C<sub>6</sub>H<sub>6</sub> and boiled for 4.5 hours with 0.3 mole (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>SO<sub>4</sub> and then for 3 hours with 31.55 g Ba(OH)<sub>2</sub> and 200 ml water; obtained 72.8% XIV, BP 65-67°/20 mm,  $n^{20}_D$  1.4128. From 0.1 mole C<sub>6</sub>H<sub>5</sub>-COBr(CH<sub>3</sub>)<sub>2</sub>, HC(OC<sub>2</sub>H<sub>5</sub>)<sub>3</sub> and Zn in C<sub>6</sub>H<sub>6</sub> (boiling 10 hours) was synthesized C<sub>6</sub>H<sub>5</sub>COC(CH<sub>3</sub>)<sub>2</sub>CH(OC<sub>2</sub>H<sub>5</sub>)<sub>2</sub> (XVI), yield 14.7%, BP 148/12 mm,  $n^{20}_D$  1.4940. 0.5 g XVI treated with 20 ml 80% H<sub>2</sub>SO<sub>4</sub>, cooling with ice, for 30 minutes, decomposed with ice, precipitate sublimated at 145°/0.1 mm, to get C<sub>6</sub>H<sub>5</sub>COC(CH<sub>3</sub>)<sub>2</sub>CHO, yield 100%, MP 158-158.5° (from 75% alcohol). Pyrolysis of

Card: 6/7

Country : Czechoslovakia  
Category :

G-2

Abs, Jour. :

19357

Author :  
Institut. :  
Title :

Orig. Pub. :

Abstract : of ketal of  $C_6H_5COCH(CH_3)_2$  in the presence of  $p-CH_3C_6H_4SO_3H$  was obtained  $\alpha$ -ethoxy- $\beta,\beta$ -dimethylstyrene,  
BP 98-100°/9 mm,  $n^{20}D$  1.5169. Communication I see RZhKhim,  
1958, 39539. -- J. Kucera.

Card: 7/7

b-4

ZEMLICKA, J.; SMRT, J.

Phosphates derived from 3-hydroxysulfolane and 3-hydroxysulfol-2-ene  
as phosphorylating agents. Coll Cz chem 27 no.10:2404-2407 0 '62.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague.

ZEMLICKA, J.

*✓ Synthetic reactions of dimethylformamide. III. Preparation of  $\beta$ -chlorovinyl aldehydes<sup>1</sup>* Z. Arnold and J. Zemlicka (Ceskoslov. Akad.-ved., Prague). *Czechoslov. Chem. Commun.*, 24, 2378-84 (1959) (in German); cf. C.A. 53, 60074, 112065. — The prepn. of  $\text{ClCH:CRCHO}$  [ $R = H$  (I),  $\text{Me}$  (II),  $\text{Et}$  (III),  $\text{Am}$  (IV),  $\text{Ph}$  (V),  $\text{PACH}_2$  (VI),  $\text{PACl}_2$ ;  $\text{CMcCHO}$  (VII), and  $\text{NCH:CMcCOPh}$  (VIII)] was given. The  $\beta$ -chlorovinyl aldehydes were unstable even at 0° in sealed ampuls; they gave a pos. reaction with  $2,4-(\text{O}_2\text{N})_2\text{C}_6\text{H}_3\text{NNH}_2$  and a neg. reaction with  $\text{FeCl}_3$ ; the Cl atom reacted readily with  $\text{Me}_2\text{NH}$  with the formation of the corresponding  $\beta$ -dimethylamino compds. which gave a characteristic coloration with  $\text{FeCl}_3$ . Excess (about 50 g.)  $\text{COCl}_2$  was introduced with stirring and cooling with NaCl-ice mixt. into 18.8 g. anhyd.  $\text{CH}_3(\text{CHO})_2$  Na salt and stirring was continued 90 min. Filtering off the ppt., washing with  $\text{Et}_2\text{O}$ , evapg. the filtrates *in vacuo* (bath temp. below 40°), and distg. gave 13.2 g. I, b.p. 37-41°, n<sub>D</sub><sup>20</sup> 1.4823. Similarly, the  $\text{HCOCH:CHCH}_2\text{CHO}$  Na salt gave 55%  $\text{ClCH:CHCH}_2\text{CHO}$ , m.p. 57° (cyclohexane). Treating a suspension of 8.12 g.  $\text{HOCH:CMcCOPh}$  in 100 ml.  $\text{C}_6\text{H}_6$  with 23 ml. 4.36N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$ , keeping the mixt. 1 hr. at room temp., evapg., adding again 23 ml., and distg. the next day gave 6.54 g.  $\text{Me}_2\text{NCH:CMcCOPh}$  (IX), b.p. 127-130°, m. 45.5-7° ( $\text{Et}_2\text{O}$  at -15°). Heating 13 hrs. in an autoclave on a steam bath 4.5 g.  $\text{ClCPb:CMcCHO}$  with 50 ml. 4.38N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$ , filtering off the pptd.  $\text{Me}_2\text{NH}_2\text{Cl}$ , evapg. *in vacuo*, dissolving the residue in 200 ml.  $\text{H}_2\text{O}$ , extg. the soln. with petr. ether, satg. the aq. layer with  $\text{K}_2\text{CO}_3$ , extg. with  $\text{C}_6\text{H}_6$ , drying the exts. with  $\text{K}_2\text{CO}_3$ , and distg. gave 3.1 g.  $\text{Me}_2\text{NCPb:CMcCHO}$ , b.p. 145-150° (bath temp.).  $\text{COCl}_2$  (0.025 mole) in  $\text{CHCl}_3$  was added dropwise in 5 min. with stirring and cooling into 0.01 mole  $\text{Me}_2\text{NCH:CMcCHO}$  in 5 ml.  $\text{CHCl}_3$  and the mixt.

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169/13  
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was stirred 45 min. at room temp. (evolution of  $\text{CO}_2$ ); evapg. *in vacuo* gave an unstable cryst. residue [ $\text{Me}_2\text{N:CH:CHCl:CHCl}$ ] which was decomposed with stirring and cooling (ice) by the addn. of 25 ml.  $\text{H}_2\text{O}$  and 20 ml.  $\text{Et}_2\text{O}$ . Extg. the aq. layer with  $\text{Et}_2\text{O}$ , combining the  $\text{Et}_2\text{O}$  exts., washing with  $\text{H}_2\text{O}$ , 1:1 aq.  $\text{NaHCO}_3$ , and  $\text{H}_2\text{O}$ , drying ( $\text{MgSO}_4$ ), and distg. gave 55% II, b.p. 53-60°, n<sub>D</sub><sup>20</sup> 1.4800. Similarly were prep'd.: III (84%), b.p. 50-5°, n<sub>D</sub><sup>20</sup> 1.4745; V (56%), b.p. 60°, m. 25-6° ( $\text{Et}_2\text{O}$  at -70°); VI (84%), b.p. 85-90°, m. 32-3° (petr. ether at -15°); VII (82%), b.p. 100-6° (bath temp.); VIII (24%), b.p. 90-3° (bath temp.). In the prepn. of III (78%) and IV (79%), b.p. 100°, n<sub>D</sub><sup>20</sup> 1.4718, 0.011 mole  $\text{POCl}_3$  in  $\text{CHCl}_3$  was also used instead of  $\text{COCl}_2$ .  $\rho$ - $\text{MeC}_6\text{H}_4\text{SO}_2\text{Cl}$  with  $\text{Me}_2\text{NCH:CHCHO}$  in  $\text{C}_6\text{H}_6$ , sohn. in a mole ratio 1:1 gave only 25% III. Keeping 10 mg. VIII 2 days with 1 ml. 4.38N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$  gave IX, R<sub>f</sub> 0.05 (by chromatography on a paper impregnated with  $\text{HCONMe}_2$  and development with cyclohexane). A surprising stability of the unsubstituted salt [ $\text{Me}_2\text{N:CHCH:CHCl:CHCl}$  (m. not given) towards hydrolysis is mentioned in contrast to the behavior of the substituted derivs. IV. Preparation of  $\beta$ -chlorovinyl aldehydes from carbonyl compounds. *Ibid.* 2385-92.—Reactions of  $\text{RCO:CH}_2\text{R}'$  with  $\text{HCONMe}_2$  and  $\text{POCl}_3$  in a molar ratio 1:3:2.5 gave  $\text{ClCR:CR'CHO}$  ( $R, R'$ , reaction time, bath temp., yield, b.p., and n<sub>D</sub><sup>20</sup> given:  $\text{Me}_2\text{H}_2$ , 45 or 30 min., 20° or 35°, 38%;  $\text{b}_2$ , 21-63° (bath. temp.), 1.4790;  $\text{Me}_2\text{Me}$  (I), 95 min., 35-40°, 67%;  $\text{b}_2$ , 53-5°, 1.4915;  $\text{Et}_2\text{Me}$ , 30 min., 35-40°, 77%;  $\text{b}_2$ , 57°, 1.4871;  $\text{Ph}_2\text{H}$  (II), 2 hrs., 40-45°, 47%,  $\text{b}_2$ , 99-103°, 1.6168 (semicarbazone, m. 206-7° ( $\text{EtOH}$ ));  $\text{Ph}_2\text{Me}$  (III), 3 hrs., 40-45°, 94%,  $\text{b}_2$ , 117°, 1.6933 (semicarbazone, m. 154-5°); ( $\text{RR}' = (\text{CH}_2)_k$ ) (IV), 1 hr. or 30 min., 20° or 35-40°, 66%,  $\text{b}_2$ , 58°, 1.6102; ( $\text{RR}' = (\text{CH}_2)_k$ ), 20 min., 20-40°, 54%,  $\text{b}_2$ , 87°, 1.6225; ( $\text{RR}' = (\text{CH}_2)_k$ ), 40 min., 35-40°, 65%,  $\text{b}_2$ , 95-8°, 1.6227; ( $\text{RR}' = (\text{CH}_2)_k$ ), 45 min., 35-40°, 63%,  $\text{b}_2$ , 135-40° (bath temp.), 1.6247. Similarly, only 28%  $\text{ClCH:CHCHO}$ , b.p. 52-6°, was prep'd. from  $\text{PrCHO}$ . The ketone (0.05 molar) added

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In 5-15 min. with stirring and  $\text{N}_2$ -cooling into the reagent (prepd. by treating in 5-15 min. at 0° 11.3 ml.  $\text{POCl}_3$  with 11 g.  $\text{HCONMe}_2$  and stirring 30 min. at room temp.). The mixt. is kept 30-90 min. in a bath at 20-45° and decompr. with 180 g. ice. The product is isolated by extn. with  $\text{Et}_2\text{O}$ , washing the exts. with aq.  $\text{NaHCO}_3$  or  $\text{Na}_2\text{CO}_3$  or  $\text{NaOH}$ , resp., to remove any hydroxymethyleneketone  $\text{RCOC(CHO)CH}_2$  present, and distg.; in some cases, the decompr. mixt. is neutralized with solid  $\text{NaHCO}_3$ , steam distd., the distillate satd. with  $\text{NaCl}$ , the product extd. with  $\text{Et}_2\text{O}$ , and distd. Only traces of the isomeric  $\text{CICB}(\text{CHCHO})(\text{V})$  were detd. in the prepn. of I from  $\text{MeCOEt}$ . Treating V with 4.38N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$  and keeping the mixt. 3 days at room temp. gave  $\text{Me}_2\text{NCH}(\text{CHCOEt})(\text{VI})$  ( $R_f$  0.33 by paper chromatography in  $\text{iso-Pr}_2\text{O}-\text{H}_2\text{O}$ ), the product of a rearrangement. VI, b.p. 69.5-101°, was also prepd. from  $\text{CICH}_2\text{CHCOEt}$  and  $\text{Me}_2\text{NH}$  in 1:1  $\text{C}_6\text{H}_6-\text{MeCH}_2$ . I, b.p. 68° (bath temp.),  $n_D^20$  1.4917, was prepd. (yield 68%) from  $\text{Me}_2\text{NCH}_2\text{CMeCOMe}$  (VII) and  $\text{COCl}_2$ . Similarly, authentic V, b.p. 68-69°,  $n_D^20$  1.4748, was prepd. (yield 18%) from VII and  $\text{COCl}_2$ . Adding with agitation in 10 min. at 0° 0.05

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2 mole *tert*-BuCOMe into a reagent prepd. from 0.25 mole  $\text{Me}_2\text{NH}$  and 0.125 mole  $\text{COCl}_2$  (*loc. cit.*), heating the mixt. 1.5 or 3.5 hrs. to 70° or 55°, resp., decompr. with 0.2 mole anhyd.  $\text{NaOAc}$  and 100 g. ice, sepq. the layers, extg. the aq. layer with  $(\text{CH}_2\text{Cl})_2$ , combining the exts., washing with  $\text{H}_2\text{O}$ , drying ( $\text{MgSO}_4$ ), and distg. gave 80%  $\text{CIC}(\text{tert-Bu})\text{CH}_2\text{CHO}$  (VIII), b.p. 69° (bath temp.),  $n_D^20$  1.4769. Similarly, PhCOEt gave 50% III. Reactions of the  $\text{HCONMe}_2-\text{COCl}_2$  reagent with  $\text{PhCOPr-Iso}$  and  $\text{CICPh}:\text{CH}_2$  failed. Reaction of II with excess 4N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$  gave [ $\text{Me}_2\text{NCPH}:\text{CHCH}(\text{NMe}_2)\text{Cl}$ ] [picrate, m. 60-1° ( $\text{EtOH}$ )], and traces of  $\text{Me}_2\text{NCPH}:\text{CHCHO}$ ,  $R_f$  0.41 by paper chromatography with  $\text{CH}_3(\text{OBu})_2-\text{H}_2\text{O}$ . Heating 1 hr. on a steam bath in an autoclave 5 g. VIII with 23 ml. 4.35N  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$ , cooling, filtering off the  $\text{Me}_2\text{NH}_2\text{Cl}$ , washing with  $\text{C}_6\text{H}_6$ , and distg. gave 46%  $\text{Me}_2\text{NCH}(\text{CHCOEt})(\text{tert-Bu})$ , b.p. 115°, m. 38.5° ( $\text{Et}_2\text{O}$  at -18°). Treating IV with  $\text{Me}_2\text{NH}$  in  $\text{C}_6\text{H}_6$  at room temp. gave 2-dimethylamino-1-cyclopentene-carboxaldehyde ( $R_f$  0.06) and 2-dimethylamino-methylenecyclopentanone ( $R_f$  0.26) as shown by paper chromatography in  $\text{CH}_3(\text{OBu})_2-\text{H}_2\text{O}$ . The Benary method (*C.A.* 24, 4507) was used to prep. VII,  $R_f$  0.04 ( $\text{iso-Pr}_2\text{O}-\text{H}_2\text{O}$ ), m. 40° ( $\text{Et}_2\text{O}$ ). J.H. Pliml.